WHAT IS CLAIMED IS:

1. A method of generating a sequence of N symbols from a sequence of L code symbols in a system having an encoder for generating the sequence of L code symbols and a channel interleaver for receiving the sequence of N symbols, N being greater than L, comprising the steps of:

detecting symbols at substantially equidistant (N–L) positions among the L code symbols; and

for each detected symbol, sequentially inserting the detected symbol before or after the position of the detected symbol in the sequence of L code symbols by repetition.

2. The method of claim 1, wherein the code symbols are generated by convolutional encoding.

3. The method of claim 1, wherein the code symbols are generated by linear block encoding.

4. The method of claim 1, wherein the code symbols are generated by turbo encoding.

5. A transmitting device in a communication system, comprising:

an encoder for generating a sequence of L code symbols by encoding source information;

a channel interleaver for receiving a sequence of N symbols being greater than the L code symbols; and

an FDRT (Flexible Data Rate Transmission) block for generating the sequence of N symbols from the sequence of L code symbols by detecting symbols at substantially equidistant (N–L) positions among the L code symbols

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and for each detected symbol, sequentially inserting the detected symbol before or after the position of the detected symbol in the sequence of L code symbols by repetition.

5   6.   The transmitting device of claim 5, wherein the encoder is a convolutional encoder.

7.   The transmitting device of claim 5, wherein the encoder is a linear block encoder.

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8.   The transmitting device of claim 5, wherein the encoder is a turbo encoder.

9.   A method of generating a sequence of N symbols from a
15 sequence of L code symbols being less than the N symbols in a system having a turbo encoder for outputting the L code symbols including a first group of symbols, a second group of symbols, and a third group of symbols and a channel interleaver for receiving the N symbols, the symbols of the first group being of greater significance than the symbols of the second and third groups, the method
20 comprising the steps of:

determining an offset value to select a first repeated symbol position in the second or third group among the L code symbols;

determining symbols at every period starting from the symbol at the position corresponding to the offset value to be non-repeated symbols, the period
25 being determined according to a code rate of the turbo encoder;

detecting substantially equidistant (N–L) symbols among the L code symbols except for the non-repeated symbols; and

for each detected symbol, sequentially inserting the detected symbol before or after the position of the detected symbol in the sequence of L code

symbols by repetition.

10.   The method of claim 9, wherein when the code rate of the turbo encoder is 1/k, the offset value is a natural number less than k.

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11.   The method of claim 9, wherein when the code rate of the turbo encoder is 1/k, the period is the product of k and q (q is a natural number).

12.   A method of generating a sequence of N symbols from a
10 sequence of L code symbols being less than the N symbols in a communication system having an encoder for generating the sequence of L code symbols and a symbol repeater for repeating (N–L) symbols among the L code symbols to generate the sequence of N symbols, comprising the steps of:

(a) setting an error accumulation value for a first considered symbol of
15 the L code symbols;

(b) comparing the error accumulation value with a predetermined threshold;

(c) repeating a symbol corresponding to the considered symbol if the error accumulation value is less than the threshold and resetting a new error
20 accumulation value for the corresponding symbol by adding the error accumulation value to a predetermined increment and returning to step (b);

(d) setting a new error accumulation value obtained by subtracting a predetermined decrement from the error accumulation value for a next symbol if the error accumulation value is greater than the threshold and returning to step
25 (b); and

(e) ending the steps if the sequence of N symbols are generated from the L code symbols during the step (c) or (d).

13.   The method of claim 12, wherein the step (a) comprises the steps

of:

(a1) calculating a first parameter by multiplying a second variable Ib by L, a first variable Ia and the second variable Ib being used to determine the first repeated symbol position in a predetermined frame and the second variable Ib being an integer satisfying $1 \leq Ib \leq Ia$;

(a2) calculating a second parameter by multiplying the first variable by (N–L); and

(a3) setting the error accumulation value for the first symbol among the L code symbols by subtracting the second parameter from the first parameter.

14. The method of claim 12, wherein the threshold is 0.

15. The method of claim 13, wherein the increment is the product of the first variable and L.

16. The method of claim 13, wherein the decrement is the first parameter.

17. An apparatus for generating a sequence of N symbols from a sequence of L code symbols being less than the N symbols in a communication system having an encoder for generating the sequence of L code symbols and a symbol repeater for repeating (N–L) symbols among the L code symbols to generate the sequence of N symbols, the apparatus comprising:

a register for outputting a first parameter being the product of a second variable Ib and L as a first error accumulation value, a first variable Ia and the second variable Ib being used to determine the first repeated symbol position in a predetermined frame and the second variable Ib being an integer satisfying $1 \leq Ib \leq Ia$;

a subtractor for subtracting a second parameter being the product of the

first variable and (N–L) from the first error accumulation value and outputting the subtraction result as a second error accumulation value;

a selector for receiving the second error accumulation value and a third accumulation value and outputting the second or third error accumulation value 5 selectively as a fourth error accumulation value;

an adder for receiving the fourth error accumulation value, adding the fourth error accumulation value to a third parameter being the product of the first variable and L, and outputting the sum as the third error accumulation value;

a comparator for comparing the fourth error accumulation value with a 10 predetermined threshold and generating an output signal according to a result of the comparing; and

a symbol repeater for receiving at least one output signal from the comparator for each symbol and repeating a symbols for which an output signal is from the result that the error accumulation value is less than or equal to the 15 threshold, thereby generating the sequence of N symbols,

wherein the comparator outputs a control signal to control the selector to select the second error accumulation value as the fourth error accumulation value if the fourth error accumulation value is greater than the threshold and outputs a control signal to control the selector to select the third error accumulation value 20 as the fourth error accumulation value if the fourth error accumulation value is less than or equal to the threshold; and

the register outputs the first parameter as the first error accumulation value for the first symbol among the L code symbols and the second error accumulation values of the previous symbols as updated first error accumulation 25 values for the following symbols.

18.   The apparatus of claim 17, further comprising an inverter connected between the comparator and the register, for enabling the register in response to a control signal from the comparator to update the first error

accumulation value with the second error accumulation value.

19.   The apparatus of claim 18, wherein the register is enabled in response to the control signal if the comparator determines that the fourth error accumulation value is greater than the threshold, updates the first error accumulation value with the second error accumulation value, and outputs the updated first error accumulation value.

20.   The apparatus of claim 17, wherein the threshold is 0.